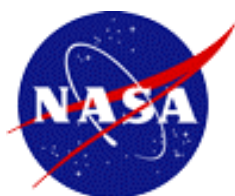


**SECTION E.2**  
**LEPIDOPTERA OF LEWIS FIELD**



**Prepared by:**  
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**For**  
**Ohio Department of Natural Resources**  
**Division of Natural Areas and Preserves**

# **LEPIDOPTERA SURVEY**

NASA Glenn Research Center  
Cuyahoga County  
Cleveland, Ohio  
2001

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Arcadia, Ohio  
419-894-6554

## **BUTTERFLIES**



## **MOTHS**



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## **Part I: Butterflies**

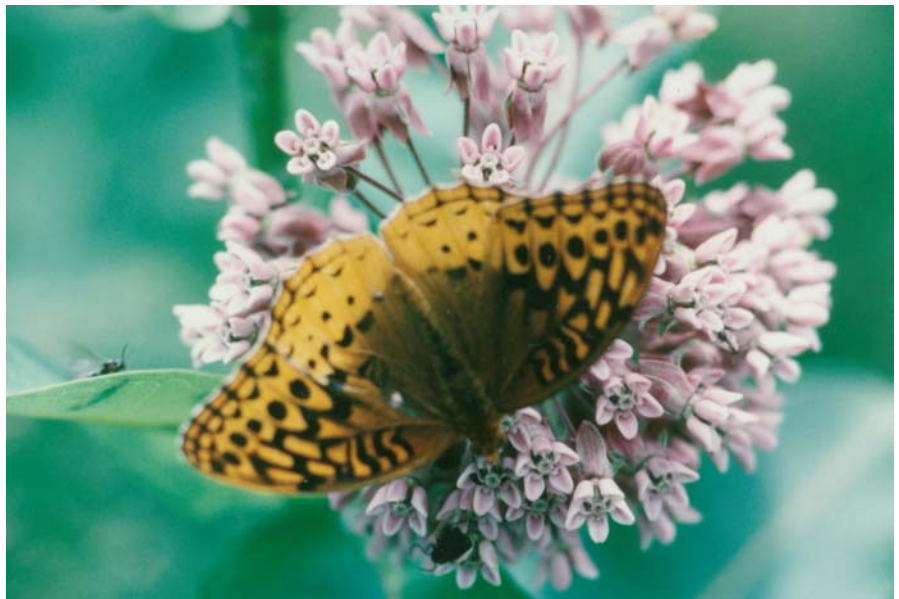


Table 1 is a listing of the moths recorded from the Center for the first time in 2001. Also, 19 species believed to be recorded for the first time in Cuyahoga County are identified. Table 2 gives the GPS coordinates for the various light trap locations. The total number of moth species recorded at the Center from the two surveys, 1995 and 2001, totals 182.

For each species the following information is given:

Hodges Number	<i>Genus species</i>	Author
Common Name		
Larva Food Plant		
Larva Image Reference	(If available)	
Adult Image Reference	(If available)	
Number Observed		
Data (Date,Trap,Number)	(for moths this data is in Appendix:A)	

Appendix B is a checklist of the lepidoptera recorded from the Center resulting from the 1995 and 2001 surveys.

### Recommendations:

Preserve what habitat is currently present at the Center. **Continue the restricted mowing in the areas where this is currently practiced and try to increase the size and number of these areas.** A large number of Peck's Skipper, *Polites peckius*, were recorded along the western edge of the exercise track on 15 August. Most butterfly species were observed in this area. Along the western edge of the track there were large patches of Dogbane, Thistle, and White Clover, which were the main nectar sources for butterflies. The Wild Indigo Dusky Wing, *Erynnis baptisiae*, was found in both areas indicated in Figure 1 because both areas have an extensive growth of Crown Vetch, which is the larval foodplant of this butterfly.

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# Lepidoptera

## Butterflies and Moths

### Introduction:

A lepidoptera (butterfly and moth) survey was conducted at the NASA Glenn Research Center, Brook Park, Cuyahoga County, Ohio from 8 May through 15 August, 2001. To survey for moths battery operated 15 watt, 12 volt DC fluorescent blacklight traps were operated from dusk to dawn using a photoelectric control. Butterflies were surveyed by visiting those sites offering the best habitats and recording species observed. Species that could not be readily recognized were netted, identified and released.

The southern most section and the western side of the Center offered the best habitat and collecting sites. Survey site selection was determined by the following factors:

- a) areas with varied plants and trees offering the richest nectar and larval food plants were surveyed.
- b) areas not illuminated by building and street lights, which compete with light traps, were chosen for the moth survey.
- c) the ravine formed by Abrams Creek contains the most significant moth habitat. After 31 July the only available road down into this ravine was blocked for construction so it was necessary to set light traps only along the west rim.
- d) the western edge of the exercise track area was visited often to survey for butterflies.

**Note:** On 11 September while traveling to the Glenn Research Center to set up light traps news of the attack in New York was given on the car radio. Anticipating strict security and the possible confusion from some individual viewing a light trap in the middle of the night, the decision was made to stop the survey.

### Results:

As a result of this survey, 17 species of butterflies were recorded. Only one or two individuals of seven of these species, *Epargyreus clarus*, *Thymelicus lineola*, *Colias philodice*, *Papilio glaucus*, *Polygonia interrogationis*, *Speyeria cybele*, and *Danaus plexippus* were observed. The most common species observed were *Erynnis baptisiae*, *Polites peckius*, *Pieris rapae*, and *Megisto cymela*.

Butterflies were most often sighted in two areas of the Center. The far south sector beyond the last building and crossing Abram's Creek up to the Metropark fence was designated area #1, see Figure 1. The exercise track west of the West Area Road was the major area, area #2, for finding butterflies. These two areas were the richest in nectar and larval food plants. Also, these two were **areas of restricted mowing**.

Light traps were placed in various locations as indicated on the map, Figure 1, to survey for moths. A total of 112 species of moths were recorded. In 1995 a moth survey of the Center recorded 129 species. Both the 1995 and 2001 surveys had 53 species in common so 59 species were found for the first time in 2001.

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**Figure 1:**  
Light Traps (T1, T2, T3, T4)  
Butterfly Areas (Area 1, Area 2)

The map shows the University of Zimbabwe campus with various buildings, roads, and landmarks. The locations of four light traps (T1, T2, T3, T4) and two butterfly areas (Area 1, Area 2) are marked. A compass rose indicates North. The map includes labels for various buildings, roads, and landmarks, such as the main building complex, the sports field, and the main road. Area 1 is located near the main building complex, and Area 2 is located near the sports field. The light traps are marked with 'T1', 'T2', 'T3', and 'T4'.



**Table 2: GPS Coordinates for Light Traps**

Date	Light Trap	Latitude	Longitude
8-May	1	N 41° 24.208'	W 81° 52.082'
	2	N 41° 24.653'	W 81° 52.165'
25-Jun	1	N 41° 24.229'	W 81° 52.083'
	2	N 41° 24.661'	W 81° 52.167'
19-Jul	1	N 41° 24.245'	W 81° 52.102'
	3	N 41° 24.854'	W 81° 52.181'
31-Jul	3	N 41° 24.854'	W 81° 52.181'
14-Aug	3	N 41° 24.854'	W 81° 52.181'
	4	N 41° 24.606'	W 81° 52.197'

**Table 1: List of species first recorded at the NASA Glenn Research Center summer 2001**

04654 <i>Tortricidia flexuosa</i> *	09301 <i>Eudryas grata</i> *
04665 <i>Lithacodes fasciola</i>	09329 <i>Apamea cariosa</i>
04669 <i>Apoda biguttata</i>	09633 <i>Callopietria cordata</i> *
05524 <i>Hypsopygia costalis</i> *	09664 <i>Balsa labecula</i>
06344 <i>Semiothisa signaria</i> *	09696 <i>Platysenta vecors</i>
06621 <i>Melanolophia signataria</i> *	09957 <i>Sunira bicolorago</i>
06654 <i>Hypagyrtis unipunctata</i>	10446.1 <i>Leucania lapidaria</i> *
06720 <i>Lytrosis unitaria</i> *	10521 <i>Morrisonia confusa</i>
06724 <i>Euchlaena serrata</i>	10674 <i>Feltia subgothica</i>
06798 <i>Ennomos subsignaria</i>	10705 <i>Euxoa messoria</i>
06822 <i>Metarranthis duaria</i> *	10891 <i>Ochropleura plecta</i> *
06941 <i>Eusarca confusaria</i>	10925.1 <i>Noctua pronuba</i> *
06987 <i>Antepione thisoaria</i>	11000 <i>Anaplectoides prasina</i> *
07169 <i>Scopula inductata</i>	
07329 <i>Anticlea vasiliata</i>	
07388 <i>Xanthorhoe ferrugata</i>	
07390 <i>Xanthorhoe lacustrata</i>	
07399 <i>Euphyia unangulata</i> *	
07440 <i>Eubaphe mendica</i>	
07709 <i>Sphingicampa bicolor</i>	
07746 <i>Automeris io</i>	
07885 <i>Darapsa myron</i>	
07895 <i>Clostera albosigma</i>	
07907 <i>Datana integerrima</i>	
07920 <i>Peridea angulosa</i>	
07983 <i>Heterocampa obliqua</i> *	
07994 <i>Heterocampa guttivitta</i>	
08171 <i>Apantesis nais</i>	
08238 <i>Euchaetes egle</i>	
08318 <i>Lymantria dispar</i>	
08338 <i>Phalaenophana pyramusais</i> *	
08351 <i>Zanclognatha cruralis</i>	
08393 <i>Lascoria ambigualis</i>	
08398 <i>Palthis asopialis</i>	
08443 <i>Bomolocha bijugalis</i> *	
08445 <i>Bomolocha abalienalis</i> *	
08479 <i>Spargaloma sexpunctata</i>	
08555 <i>Scoliopteryx libatrix</i>	
08727 <i>Parallelia bistriaris</i>	
08738 <i>Caenurgina crassiuscula</i>	
08834 <i>Catocala amatrix</i>	
09047 <i>Lithacodia muscosula</i>	
09057 <i>Homophoberia apicosa</i>	
09229 <i>Acronicta hasta</i>	
09237 <i>Acronicta interrupta</i> *	
09299 <i>Eudryas unio</i> *	

Species marked with an Asterisk (\*) are new records for Cuyahoga County, Ohio

**Table 2: GPS Coordinates for Light Traps**

Date	Light Trap	Latitude	Longitude
8-May	1	N 41° 24.208'	W 81° 52.082'
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	2	N 41° 24.661'	W 81° 52.167'
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	3	N 41° 24.854'	W 81° 52.181'
31-Jul	3	N 41° 24.854'	W 81° 52.181'
14-Aug	3	N 41° 24.854'	W 81° 52.181'
	4	N 41° 24.606'	W 81° 52.197'

## HESPERIOIDEA

### Hesperiidae The Skippers

**03870** Epargyreus clarus Cramer

Common Name Silver-spotted Skipper

Larval Food Black locust, honey-locust, and hog-peanut

Larva Image Allen (1997) Pl. 39

Adult Image Iftner (1992) Pl. 8, Allen (1997) Pl. 24

**Number Observed 1**

Data 15-Aug Area 2 1

**03959** Erynnis baptisiae (Forbes, 1936)

Common Name Wild Indigo Dusky Wing

Larval Food Crown vetch, wild indigo

Larva Image Allen (1997) Pl. 41

Adult Image Iftner (1992) Pl. 9, Allen (1997) Pl. 26

**Number Observed 20+**

Data 20-Jul Area 1 10+ 20-Jul Area 2 10+

**04004** Ancyloxypha numitor (Fabricius, 1793)

Common Name Least Skipper

Larval Food Grasses, corn

Larva Image Allen (1997) Pl. 41

Adult Image Iftner (1992) Pl. 10, Allen (1997) Pl. 27

**Number Observed 16+**

Data 15-Aug Area 2 5 25-May Area 1 1 26-May Area 2 10+

**04012** Thymelicus lineola (Ochsenheimer, 1808)

Common Name European Skipper

Larval Food Timothy, grasses

Larva Image Allen (1997) Pl. 41

Adult Image Iftner (1992) Pl. 10, Allen (1997) Pl. 27

**Number Observed 1**

Data 26-May Area 2 1

**04036** Polites peckius (Cramer, 1775)

Common Name Peck's Skipper

Larval Food Grasses

Larva Image

Adult Image Iftner (1992) Pl. 11

**Number Observed TNTC**

Data 15-Aug Area 2 TNTC 26-May Area 2 1

**04048**          Pompeius          verna          (W. H. Edwards, 1862)

Common Name Little Glassy Wing

Larval Food Grasses

Larva Image

Adult Image Iftner (1992) Pl. 11, Allen (1997) Pl. 28

**Number Observed 5**

Data 26-May Area 2 5

## **PAPILIONIDEA**

**Papilionidae**          The Swallowtails

**04176**          Papilio          glaucus          Linnaeus, 1758

Common Name Tiger Swallowtail

Larval Food Wild cherry, sassafras, tulip tree

Larva Image Opler (1992) Pl. 2 (5,6)

Adult Image Iftner (1992) Pl. 15, Pl. 16, Opler (1984) Pl. 3 (16-18)

**Number Observed 1**

Data 15-Aug Area 2 1

**Pieridae**          Whites and Sulfurs

**04197**          Pieris          rapae          (Linnaeus, 1758)

Common Name European Cabbage White

Larval Food Mustards

Larva Image Allen (1997) Pl. 31

Adult Image Iftner (1992) Pl. 17, Allen (1997) Pl. 4

**Number Observed TNTC**

Data	15-Aug	Area 2	TNTC	20-Jul	Area 1	4	25-May	Area 1	1
	19-Jul	Area 1	10+	20-Jul	Area 2	TNTC	26-May	Area 2	10+

**04209**          Colias          philodice          Godart, 1819

Common Name Clouded Sulphur

Larval Food Clover

Larva Image Allen (1997) Pl. 32

Adult Image Iftner (1992) Pl. 18, Allen (1997) Pl. 5

**Number Observed 2**

Data	20-Jul	Area 2	1	26-May	Area 2	1
------	--------	--------	---	--------	--------	---

**04210**            Colias                    eurytheme                    Boisduval, 1852

Common Name    Alfalfa Butterfly

Larval Food        Alfalfa, yellow hop clover

Larva Image       Allen (1997) Pl. 32

Adult Image       Iftner (1992) Pl. 18, Allen (1997) Pl. 5

**Number Observed 15+**

Data 26-May    Area 2        15+

**Nymphalidae**            Brushfooted Butterflies

**04420**            Polygonia                    interrogationis                    (Fabricius, 1798)

Common Name    Question Mark

Larval Food        Elm, hackberry

Larva Image       Wagner (1997) p. 95

Adult Image       Iftner (1992) Pl. 29 and 30

**Number Observed 2**

Data 25-May    Area 1        1                    26-May    Area 2        1

**04435**            Vanessa                    cardui                    (Linnaeus, 1758)

Common Name    Painted Lady

Larval Food        Thistle, mallow

Larva Image       Wright (1993) p. 104

Adult Image       Iftner (1992) Pl. 32

**Number Observed 7**

Data 15-Aug    Area 2        6                    20-Jul    Area 2        1

**04437**            Vanessa                    atalanta                    (Fruhstorfer, 1909)

Common Name    Red Admiral

Larval Food        Nettles

Larva Image       Wright (1993) p. 102

Adult Image       Iftner (1992) Pl. 33

**Number Observed 12+**

Data 8-May    Area 1        1                    25-May    Area 1        1                    26-May    Area 2        10+

**04450**            Speyeria                    cybele                    (Fabricius, 1775)

Common Name    Great Spangled Fritillary

Larval Food        Violets

Larva Image       Allen (1997) Pl. 36

Adult Image       Iftner (1992) Pl. 26, Allen (1997) Pl. 11

**Number Observed 2**

Data 20-Jul    Area 1        1                    25-May    Area 1        1

**04481**      Phyciodes      tharos      (Drury, 1773)

Common Name   Pearl Crescent

Larval Food     Asters

Larva Image    Allen (1997) Pl. 37

Adult Image    Iftner (192) Pl. 28, Allen (1997) Pl. 15

**Number Observed 7**

Data 15-Aug   Area 2      4      20-Jul   Area 2      3

**Satyridae**      Satyr and Wood Nymph Butterflies

**04578**      Megisto      cymela      (Cramer, 1777)

Common Name   Little Wood Satyr

Larval Food     Grasses

Larva Image    Allen (1997) Pl. 39

Adult Image    Iftner (1992) Pl. 36, Allen (1997) Pl. 22

**Number Observed 31+**

Data 19-Jul   Area 1      1      25-May   Area 1      15+      26-May   Area 2      15+

**Danaidae**      Milkweed Butterflies

**04614**      Danaus      plexippus      (Linnaeus, 1758)

Common Name   Monarch

Larval Food     Milkweeds

Larva Image    Wright (1993) p. 70

Adult Image    Iftner (1992) Pl. 38

**Number Observed 2**

Data 15-Aug   Area 2      1      20-Jul   Area 2      1



## **Part II:**

## **Moths**





## ZYGAENOIDEA

### Limacodidae

**04654** Tortricidia flexuosa

(A.R. Grote, 1880)

Common

Food Apple, black cherry, hickory, oak, plum

III. Larva

III. Adult Covell (1984) Pl. 55 (19)

No. Recorded 3



**04665** Lithacodes fasciola

(Herrich-Schaffer, 1854)

Common Yellow-Shoulder Slug Moth

Food Apple, beech, birch, elm, hickory, oak

III. Larva Wagner (1997) p. 89

III. Adult Covell (1984) Pl. 55 (23)

No. Recorded 1



**04669** Apoda biguttata

(Packard, 1864)

Common

Food Blue beech, hickory, oak

III. Larva

III. Adult Covell (1984) Pl. 55 (25)

No. Recorded 2



**04671** Prolimacodes badia

(Hubner, 1822)

Common Skiff Moth

Food Birch, oak, willow, poplar, many woody plants

III. Larva Mitchell/Zim (1987) p. 145

III. Adult Covell (1984) Pl. 56 (5)

No. Recorded 1



## PYRALOIDEA

### Pyralidae

#### Pyraustinae

**05159**    *Desmia*                      *funeralis*

(Hubner, 1796)

**Common**    The Grape-Leaf Folder

**Food**        Grapes, redbud, evening-primrose

**III. Larva**    Holland (1968) p. 392

**III. Adult**    Covell (1984) Pl. 56 (11)

**No. Recorded**    **7**



#### Pyralinae

**05524**    *Hypsopygia*                      *costalis*

(Fabricius, 1775)

**Common**    Clover Hayworm Moth

**Food**        Feeds on hay

**III. Larva**

**III. Adult**    Covell (1984) Pl. 59 (3)

**No. Recorded**    **20**



**05533**    *Herculia*                              *olinalis*

(Guenee, 1854)

**Common**

**Food**        Oaks

**III. Larva**

**III. Adult**    Covell (1984) Pl. 59 (4)

**No. Recorded**    **4**



## GEOMETROIDEA

### Geometridae

#### Ennominae

**06273**     *Itame*                             *pustularia*

(Guenee, 1857)

**Common**    Lesser Maple Spanworm Moth

**Food**        Maples

**III. Larva**

**III. Adult**    Covell (1984) Pl. 48 (8), McGuffin (1972)  
                     Figs. 182, 183

**No. Recorded**    **24**



**06344**     *Semiothisa*                         *signaria*

(Huebner, 1800-09)

**Common**    Pale-Marked Angle

**Food**        Firs, pines, spruces, other conifers

**III. Larva**

**III. Adult**    Covell (1984) Pl. 50 (12)

**No. Recorded**    **14**



**06348**     *Semiothisa*                         *fissinotata*

(Walker, 1863)

**Common**    Hemlock Angle

**Food**        Eastern Hemlock

**III. Larva**    Wagner (1997) p. 84

**III. Adult**    Covell (1984) Pl. 50 (11)

**No. Recorded**    **4**



**06621**     *Melanolophia*                         *signataria*

(Walker, 1860)

**Common**    Signate Melanolophia

**Food**        Elm, alder, birch, maple, oak, poplar, spruce

**III. Larva**

**III. Adult**    Covell (1984) Pl. 52 (2)

**No. Recorded**    **2**





**06654** Hypagyrtis unipunctata  
**Common** One-Spotted Variant  
**Food** Birch, hickory, oak, pine, willow  
**III. Larva** Wagner (1997) p. 73f  
**III. Adult** Covell (1984) Pl. 51 (9,12)  
**No. Recorded** 2

Haworth



**06720** Lytrosis unitaria  
**Common** Common Lytrosis  
**Food** Oak, maple, hawthorn  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 52 (10)  
**No. Recorded** 2

(Herrich-Schaeffer, 1854)



**06724** Euchlaena serrata  
**Common** The Saw-Wing  
**Food** Apple, maple  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 51 (15)  
**No. Recorded** 10

(Drury, 1770)



**06798** Ennomos subsignaria  
**Common** Elm Spanworm Moth  
**Food** Apple, birch, elm, oak, maple  
**III. Larva** Mitchell/Zim (1987) p. 142, Wagner (1995) p. 20  
**III. Adult** Covell (1984) Pl. 48 (5)  
**No. Recorded** 7

(Hubner, 1823)



**06822** Metarranthis duaria

(Guenee, 1857)

**Common** Ruddy Metarranthis

**Food** Adler, aspen, cherry, basswood, willow

**III. Larva** McCabe (1991) p. 22

**III. Adult** Covell (1984) Pl. 53 (15)

**No. Recorded** 1



**06840** Plagodis serinaria

Herrich-Schaeffer, 1855

**Common** Lemon Plagodis

**Food** Basswood, Aspen, Cherry, Maple, Oaks

**III. Larva**

**III. Adult** Covell (1984) Pl. 53 (2)

**No. Recorded** 1



**06844** Plagodis alcoolaria

(Guenee, 1857)

**Common** Hollow-Spotted Plagodis

**Food** Basswood, beech, maple, oak

**III. Larva**

**III. Adult** Covell (1984) Pl. 53 (4,6)

**No. Recorded** 4



**06885** Besma quercivoraria

(Guenee, 1857)

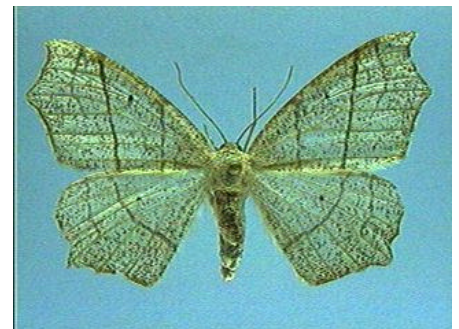
**Common** Oak Besma

**Food** Oak, elm, poplar, willow

**III. Larva** Wagner (1997) p. 71

**III. Adult** Covell (1984) Pl. 53 (19,20)

**No. Recorded** 1



**06941**    Eusarca                      confusaria  
**Common**    Confused Eusarca  
      **Food**    Asters, clover, dandelion, goldenrod  
**III. Larva**  
**III. Adult**    Covell (1984) Pl. 56 (6)  
**No. Recorded**    9

Hubner, 1813



**06963**    Tetracis                      crocallata  
**Common**    Yellow Slant-Line  
      **Food**    Sumac, willow  
**III. Larva**    McCabe (1991) p. 23  
**III. Adult**    Covell (1984) Pl. 55 (7)  
**No. Recorded**    1

Guenee, 1857



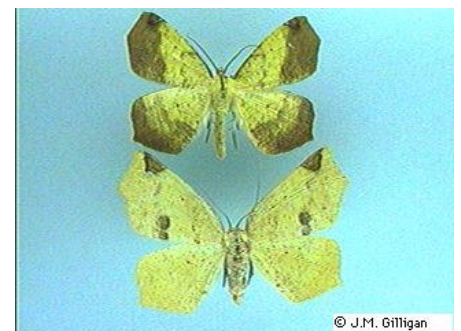
**06966**    Eutrapela                      clemataria  
**Common**    Curve-Toothed Geometer  
      **Food**    Maple, ash, birch, willow, walnut, poplar  
**III. Larva**    Wagner (1995) p. 21  
**III. Adult**    Covell (1984) Pl. 55 (1)  
**No. Recorded**    1

(J.E. Smith, 1797)



**06987**    Antepione                      thisoaria  
**Common**    Variable Antepione  
      **Food**    Apple, maple, sumac, many other plants  
**III. Larva**    Wagner (1997) p. 74  
**III. Adult**    Covell (1984) Pl. 55 (2,5)  
**No. Recorded**    2

(Guenee, 1857)





## Geometrine

**07009** Nematocampa limbata

(Haworth, 1809)

**Common** Horned Spanworm Moth

**Food** Apple, birch, lindens, hickory, oak, maple

**III. Larva** Stehr (1987) p 504 (26.281)

**III. Adult** Covell (1984) Pl. 54 (12)

**No. Recorded** 2



## Sterrhinae

**07159** Scopula limboundata

(Haworth, 1809)

**Common** Large Lace-Border

**Food** Apple, bedstraw, clover, dandelion, wild cherry

**III. Larva**

**III. Adult** Covell (1984) Pl. 48 (2,3)

**No. Recorded** 1



**07169** Scopula inductata

(Guenee, 1857)

**Common** Soft-Lined Wave

**Food** Aster, clover, dandelion, ragweeds

**III. Larva**

**III. Adult** Covell (1984) Pl. 46 (15)

**No. Recorded**



## Larentiinae

**07196** Eulithis diversilineata

(Hubner, 1813)

**Common** Lesser Grapevine Looper Moth

**Food** Grape, Virginia creeper

**III. Larva**

**III. Adult** Covell (1984) Pl. 49 (5)

**No. Recorded** 9



**07329** Anticlea vasiliata

Guenee, 1857

**Common**

**Food** *Rubus idaeus*

**III. Larva** McCabe (1991) p. 24

**III. Adult** [www.daltonstate.edu/galeps/webpages/Geometriidae/Avasillata.htm](http://www.daltonstate.edu/galeps/webpages/Geometriidae/Avasillata.htm)

**No. Recorded** 1



**07388** Xanthorhoe ferrugata

(Clerck, 1759)

**Common** Red Twin-Spot

**Food** Chickweed, ground ivy, many ground plants

**III. Larva**

**III. Adult** Covell (1984) Pl. 49 (7)

**No. Recorded** 1



**07390** Xanthorhoe lacustrata

(Guenee, 1857)

**Common** Toothed Brown Carpet

**Food** Willows, hawthorns, *Rubus* species

**III. Larva**

**III. Adult** Covell (1984) Pl. 47 (1)

**No. Recorded** 3



**07399** Euphyia unangulata

(Guenee, 1857)

**Common** Sharp-Angled Carpet

**Food** Elm, mustard, chickweed

**III. Larva**

**III. Adult** Covell (1984) Pl. 47 (22)

**No. Recorded** 6





**07414**    *Orthonama*                    *obstipata*

(Fabricius, 1794)

**Common**    The Gem

**Food**       Elm, Dock, Ragworts

**III. Larva**

**III. Adult**    Covell (1984) Pl. 49 (12,15)

**No. Recorded**    **2**



**07416**    *Orthonama*                    *centrostrigaria*

(Wollaston, 1858)

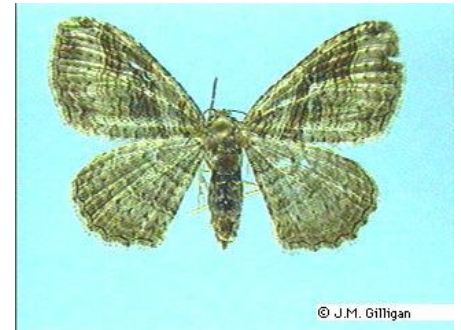
**Common**    Bent-Line Carpet

**Food**       Knotweed, Smartweed

**III. Larva**

**III. Adult**    Covell (1984) Pl. 50 (1,4)

**No. Recorded**    **3**



**07440**    *Eubaphe*                        *mendica*

(Walker, 1854)

**Common**    The Beggar

**Food**       Maple, violet

**III. Larva**

**III. Adult**    Covell (1984) Pl. 49 (17)

**No. Recorded**    **4**



## **BOMBYCOIDEA**

### **Lasiocampidae**

**07698**    *Malacosoma*                    *disstria*

Hubner, 1820

**Common**    Forest Tent Caterpillar Moth

**Food**       Cherry, Apple, many trees

**III. Larva**    Wagner (1995) p.10

**III. Adult**    Covell (1984) Pl. 11 (3)

**No. Recorded**    **15**



## Saturniidae

**07746**     Automeris                     io

(Fabricius, 1775)

**Common**     IO Moth

**Food**     Birch, oak, maple, willow, raspberry, cherry,

**III. Larva**     Mitchell/Zim (1987) p. 103

**III. Adult**     Covell (1984) Pl. 10 (2,4)

**No. Recorded**     1



## SPINGOIDEA

### Spingidae

**07885**     Darapsa                     myron

(Cramer, 1780)

**Common**     Hog Sphinx or Virginia Creeper Sphinx

**Food**     Virginia Creeper, grape

**III. Larva**     Mithcell/Zim (1987) p. 92

**III. Adult**     Covell (1984) Pl. 6 (11)

**No. Recorded**     1



## NOCTUOIDEA

### Notodontidae

**07895**     Clostera                     albosigma

Fitch, 1856

**Common**     Sigmoid Prominent

**Food**     Poplar, willow

**III. Larva**     Wagner (1997) p. 55

**III. Adult**     Covell (1984) Pl. 42 (11)

**No. Recorded**     1



**07907**     Datana                     integerrima

Grote & Robinson, 1866

**Common**     Walnut Caterpillar Moth

**Food**     Walnut, hickory, oak

**III. Larva**     Mitchell/Zim (1987) p. 133

**III. Adult**     Covell (1984) Pl. 43 (10)

**No. Recorded**     1



**07915**    *Nadata*                      *gibbosa*  
**Common**    White-Dotted Prominent  
      **Food**    Oak, birch, cherry, maple, plum  
**III. Larva**    Mitchell/Zim (1987) p. 135  
**III. Adult**    Covell (1984) Pl. 43 (14)  
**No. Recorded**    7

(J. E. Smith, 1797)



**07919**    *Peridea*                      *basitriens*  
**Common**    Oval-Based Prominent  
      **Food**    Unrecorded  
**III. Larva**    McCabe (1991) p. 26  
**III. Adult**    Covell (1984) Pl. 43 (11)  
**No. Recorded**    1

(Walker, 1855)



**07920**    *Peridea*                      *angulosa*  
**Common**    Angulose Prominent  
      **Food**    Oak  
**III. Larva**    Wagner (1997) p. 53  
**III. Adult**    Covell (1984) Pl. 43 (16)  
**No. Recorded**    5

(J. E. Smith, 1797)



**07975**    *Macrurocampa*              *marthesia*  
**Common**    Mottled Prominent  
      **Food**    Maple, oak, poplar  
**III. Larva**    Wagner (1997) p. 60  
**III. Adult**    Covell (1984) Pl. 42 (20)  
**No. Recorded**    4

(Cramer, 1780)





**07983**    *Heterocampa*        *obliqua*  
**Common**    Oblique *Heterocampa*  
**Food**        Oak  
**III. Larva**    Wagner (1997) p. 59  
**III. Adult**    Covell (1984) Pl. 43 (17,19)  
**No. Recorded**    1

Packard, 1864



**07994**    *Heterocampa*        *guttivitta*  
**Common**    Saddled Prominent  
**Food**        Apple, beech, birch, maple, sumac  
**III. Larva**    Wagner (1995) p. 17  
**III. Adult**    Covell (1984) Pl. 44 (6)  
**No. Recorded**    3

(Walker, 1855)



**08017**    *Oligocentria*        *lignicolor*  
**Common**    White-Streaked Prominent  
**Food**        Birch, oak  
**III. Larva**    Wagner (1997) p. 62  
**III. Adult**    Covell (1984) Pl. 42 (18)  
**No. Recorded**    1

(Walker, 1855)



## Arctiidae

**08129**    *Pyrrharctia*        *isabella*  
**Common**    Isabella Tiger Moth  
**Food**        Birch, clover, corn, maple, almost any  
**III. Larva**    Covell (1984) Pl. 1 (17)  
**III. Adult**    Covell (1984) Pl. 14 (12)  
**No. Recorded**    5

(J. E. Smith, 1797)



**08134** Spilosoma congrua

Walker, 1855

**Common** Agreeable Tiger Moth

**Food** Dandelion, Pigweed

**III. Larva**

**III. Adult** Covell (1984) Pl. 13 (1)

**No. Recorded** 1



**08137** Spilosoma virginica

(Fabricius, 1798)

**Common** Virginian Tiger Moth

**Food** Birch, cabbage, corn, maple, walnut, willow,

**III. Larva** Mithcell/Zim (1987) p. 115

**III. Adult** Covell (1984) Pl. 13 (4)

**No. Recorded** 5



**08169** Apantesis phalerata

(Harris, 1841)

**Common** Harnessed Moth

**Food** Dandelion, clover, plantain

**III. Larva**

**III. Adult** Covell (1984) Pl. 15 (5, 7)

**No. Recorded** 2



**08203** Halysidota tessellaris

(J. E. Smith, 1797)

**Common** Banded Tussock Moth

**Food** Grape, hackberry, oak, walnut, general feeder

**III. Larva** Mitchell/Zim (1987) P. 114

**III. Adult** Covell (1984) Pl. 12 (6)

**No. Recorded** 30



**08230**    *Cycnia*                      *tenera*                      Hubner, 1818

**Common**    Delicate *Cycnia* or Orange-Margined Dogbane

**Food**        Dogbane, milkweed

**III. Larva**    Mitchell/Zim (1987) p. 115, Wright (1993) p. 87

**III. Adult**    Covell (1984) Pl. 13 (6)

**No. Recorded**    **15**



**08238**    *Euchaetes*                      *egle*

(Drury, 1773)

**Common**    Milkweed Tussock Moth

**Food**        Milkweed

**III. Larva**    Mitchell/Zim (1987) p. 116, Wright (1993) p. 97

**III. Adult**    Covell (1984) Pl. 12 (17)

**No. Recorded**    **2**



## **Lymantriidae**

**08318**    *Lymantria*                      *dispar*

(Linnaeus, 1758)

**Common**    Gypsy Moth

**Food**        Oaks, almost any tree or shrub

**III. Larva**    Wagner (1995) p. 11, Mitchell/Zim (1987) p. 136

**III. Adult**    Covell (1984) Pl. 45 (7,10)

**No. Recorded**    **2**



## **Noctuidae**

### **Herminiinae**

**08322**    *Idia*                              *americalis*

(Guenée, 1854)

**Common**    American *Idia*

**Food**        Lichens, scavenger in ant's and bird's nests

**III. Larva**

**III. Adult**    Rings (1992) Pl. IX (1), Covell (1984) Pl. 39 (16)

**No. Recorded**    **1**





**08323**    *Idia*                      *aemula*

Hubner, 1813

**Common**    Common *Idia*

**Food**        Dead leaves

**III. Larva**

**III. Adult**    Covell (1984) Pl. 41 (12)

**No. Recorded**    7



**08338**    *Phalaenophana*        *pyramusalis*

(Walker, 1859)

**Common**    Dark-banded Owlet

**Food**        Dried leaves

**III. Larva**

**III. Adult**    Covell (1984) Pl. 41 (11)

**No. Recorded**    1



**08351**    *Zanclognatha*        *cruralis*

(Guenée, 1854)

**Common**    Early *Zanclognatha*

**Food**        Dead leaves. Balsam Fir

**III. Larva**    Wagner (1997) p. 51

**III. Adult**    Rings (1992) Pl. IX (23,24)

**No. Recorded**    3



**08353**    *Zanclognatha*        *ochreipennis*

(Grote, 1872)

**Common**    Wavy-Lined *Zanclognatha*

**Food**        Dead leaves

**III. Larva**

**III. Adult**    Covell (1984) Pl. 41 (20), Rings (1992) PL. IX (30,31)

**No. Recorded**    8



**08355** Chytolita morbidalis (Guenee, 1854)

**Common** Morbid Owlet

**Food** Dead leaves

**III. Larva**

**III. Adult** Covell (1984) Pl. 41 (24), Rings (1992) Pl. IX (32)

**No. Recorded** 2



**08381** Renia discoloralis Guenee, 1854

**Common** Discolored Renia

**Food** Dead leaves

**III. Larva**

**III. Adult** Covell (1984) Pl. 42 (6), Rings (1992) Pl. XI (11,12,13)

**No. Recorded** 5



**08393** Lascoria ambigualis Walker, 1866

**Common** Ambiguous Moth

**Food** Ragweed

**III. Larva**

**III. Adult** Covell (1984) Pl. 42 (7,10)

**No. Recorded** 1



**08398** Palthis asopialis (Guenee, 1854)

**Common** Faint-spotted Palthis

**Food** Oak, Coralberry

**III. Larva** Wagner (1997) p. 51

**III. Adult** Rings (1992) PL XI (20,21)

**No. Recorded** 1





## Hypeninae

**08443** Bomolocha bijugalis (Walker, 1859)

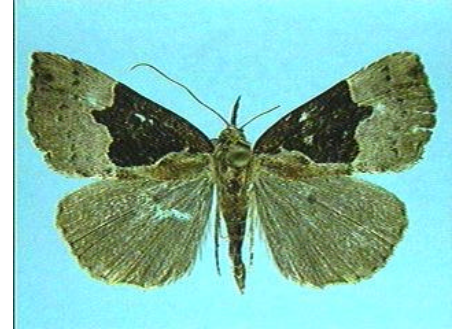
**Common** Dimorphic Bomolocha

**Food** Dogwood

**III. Larva**

**III. Adult** Rings (1992) Pl. X (5,6), Covell (1984) Pl. 40 (18,21)

**No. Recorded** 1



**08445** Bomolocha abalienalis (Walker, 1859)

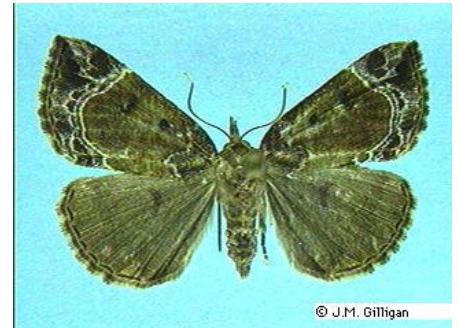
**Common** White-lined Bomolocha

**Food** Elm

**III. Larva**

**III. Adult** Rings (1992) Pl. X (9,10), Covell (1984) Pl. 40 (17,20)

**No. Recorded** 1



**08465** Plathypena scabra (Fabricius, 1798)

**Common** Green Cloverworm Moth

**Food** Small legumes

**III. Larva** Mitchell/Zim (1987) p. 125

**III. Adult** Rings (1992) Pl. X (25,26), Covell (1984) Pl. 41 (2)

**No. Recorded** 1



**08479** Spargaloma sexpunctata Grote, 1873

**Common** Six-spotted Gray

**Food** Dogbane

**III. Larva**

**III. Adult** Rings (1992) Pl 10 (29), Covell 1984) Pl. 40 (2)

**No. Recorded** 1



## Catocalinae

**08555** Scoliopteryx libatrix

(Linnaeus, 1758)

**Common** The Herald

**Food** Willow, poplar, aspen, birch

**III. Larva** McCabe (1991) p. 31

**III. Adult** Covell (1984) Pl. 39 (4)

**No. Recorded** 2



**08587** Panopoda rufimargo

(Hubner, 1818)

**Common** Red-Lined Panopoda

**Food** Oak

**III. Larva** Wagner (1997) p. 49

**III. Adult** Covell (1984) Pl. 39 (3),  
Rockburne/Lafontaine (1976) (556)

**No. Recorded** 2



**08692** Zale galbanata

(Morrison, 1876)

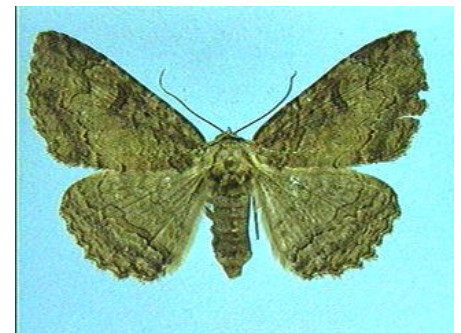
**Common** Maple Zale

**Food** Maple, box-elder

**III. Larva**

**III. Adult** Rings (1992) Pl. XII (3,7,8), Covell (1984) Pl.  
37 (17)

**No. Recorded** 1



**08727** Parallelia bistriaris

Hubner, 1818

**Common** Maple Looper Moth

**Food** Birch, maple, walnut

**III. Larva** McCabe (1991) p. 32, Wagner (1997) p. 49

**III. Adult** Covell (1984) Pl. 31 (21),  
Rockburne/Lafontaine (1976) (539)

**No. Recorded** 1



**08738**    *Caenurgina*            *crassiuscula*  
**Common**    Clover Looper  
**Food**        Clover, grasses  
**III. Larva**  
**III. Adult**    Covell (1984) Pl. 38 (3),  
                   Rockburne/Lafontaine (1976) (541)  
**No. Recorded**    1

(Haworth, 1809)



**08739**    *Caenurgina*            *erecta*  
**Common**    Forage Looper Moth  
**Food**        Alfalfa, clover, ragweed, grasses  
**III. Larva**    Mitchell/Zim (1987) p. 127  
**III. Adult**    Covell (1984) Pl. 38 (2,6),  
                   Rockburne/Lafontaine (1976) (541)  
**No. Recorded**    3

(Cramer, 1780)



**08801**    *Catocala*                *ilia*  
**Common**    Beloved Underwing or The Wife  
**Food**        Oak  
**III. Larva**    Rings (1992) Pl. IV (2), Wagner (1995) p. 13  
**III. Adult**    Covell (1984) Pl. 37 (4,7),  
                   Rockburne/Lafontaine (1976) (605,606)  
**No. Recorded**    1

(Cramer, 1776)



**08834**    *Catocala*                *amatrix*  
**Common**    The Sweetheart  
**Food**        Willow, poplar, cottonwood  
**III. Larva**  
**III. Adult**    Covell (1984) Pl. 37 (13),  
                   Rockburne/Lafontaine (1976) (602,603)  
**No. Recorded**    1

(Hubner, 1809-13)





**08857** Catocala ultronia (Hubner, 1823)

**Common** Ultronia Underwing

**Food** Apple, cherry, plum, Rosacene spp.

**III. Larva** Rings (1992) Pl. IV (3), Wagner (1997) p. 47

**III. Adult** Covell (1984) Pl. 33 (9)

**No. Recorded** 3



#### Plusiinae

**08908** Autographa precatonis (Guenée, 1852)

**Common** Common Looper Moth

**Food** Thistle, dandelion, plantain, wild lettuce,

**III. Larva** McCabe (1991) p. 33

**III. Adult** Rings (1992) Pl. XIII (12), Covell (1984) Pl. 31 (14)

**No. Recorded** 1



**08924** Anagrapha falcifera (Kirby, 1837)

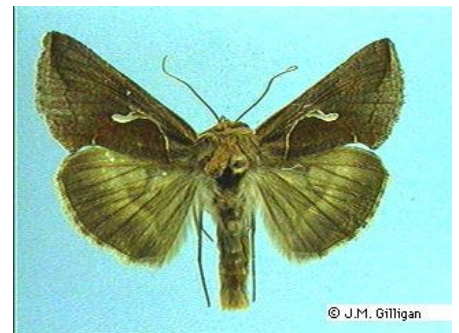
**Common** Celery Looper Moth

**Food** Clover, corn, lettuce, plantain, celery, tobacco,

**III. Larva** Wright (1993) p. 31

**III. Adult** Covell (1984) Pl. 31 (7),  
Rockburne/Lafontaine (1976) (512)

**No. Recorded** 1



#### Acontiinae

**09047** Lithacodia muscosula (Guenée, 1852)

**Common** Large Mossy Lithacodia

**Food** Grasses

**III. Larva**

**III. Adult** Covell (1984) Pl. 28 (17),  
Rockburne/Lafontaine (1976) (460)

**No. Recorded** 1



**09057** Homophoberia apicosa

(Haworth, 1809)

**Common** Black Wedge-spot

**Food** Smartweeds

**III. Larva**

**III. Adult** Rings (1992) Pl. XIII (22), Covell (1984) Pl. 29 (19)

**No. Recorded** 1



#### Acronictinae

**09229** Acronicta hasta

Guenée, 1852

**Common** Speared Dagger Moth

**Food** Black Cherry

**III. Larva** Wagner (1997) p. 28

**III. Adult** Covell (1984) Pl. 17 (15),  
Rockburne/Lafontaine (1976) (36,38)

**No. Recorded** 2



**09237** Acronicta interrupta

Guenée, 1852

**Common** Interrupted Dagger Moth

**Food** Plum, elm, apple, oaks, maple

**III. Larva** Rings (1992) Pl. IV (5)

**III. Adult** Covell (1984) Pl. 17 (16)

**No. Recorded** 1



**09245** Acronicta haesitata

(Grote, 1882)

**Common** Hesitant Dagger Moth

**Food** Oak

**III. Larva** Wagner (1997) p. 31

**III. Adult** Covell (1984) Pl. 17 (19),  
Rockburne/Lafontaine (1976) (44)

**No. Recorded** 1



## Agaristinae

**09299** Eudryas unio

(Hubner, 1827-31)

**Common** Pearly Wood-Nymph

**Food** Evening-primerose, loosestrife, grape

**III. Larva** Mitchell/Zim (1987) p. 130, Wagner (1997) p. 36

**III. Adult** Covell (1984) Pl. 27 (25),  
Rockburne/Lafontaine (1976) (7)

**No. Recorded** 2



**09301** Eudryas grata

(Fabricius, 1793)

**Common** Beautiful Wood-Nymph

**Food** Grapes, Virginia Creeper

**III. Larva**

**III. Adult** Covell (1984) Pl. 27 (23)

**No. Recorded** 2



## Amphipyridae

**09329** Apamea cariosa

(Guenée, 1852)

**Common**

**Food** Grasses

**III. Larva**

**III. Adult** Rings (1992) Pl. 14 (11),  
Rockburne/Lafontaine (1976) (329)

**No. Recorded** 1



**09545** Euplexia benesimilis

McDunnough, 1922

**Common** American Angle Shades

**Food** Dogwood, willow

**III. Larva** McCabe (1991) p. 37

**III. Adult** Covell (1984) Pl. 26 (22),  
Rockburne/Lafontaine (1976) (396)

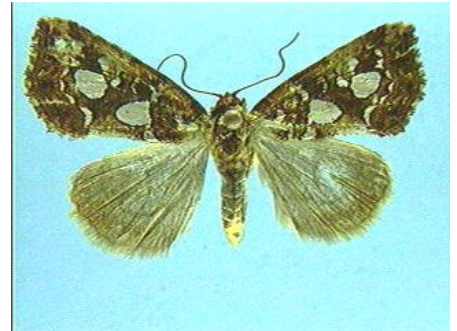
**No. Recorded** 3





**09633** Callopistria cordata  
**Common** Silver-spotted Fern Moth  
**Food** Ferns  
**III. Larva** McCabe (1991) p. 38  
**III. Adult** Covell (1984) Pl. 26 (14),  
 Rockburne/Lafontaine (1976) (438)  
**No. Recorded** 1

(Ljungh, 1825)



**09638** Amphipyra pyramidoides  
**Common** Copper Underwing  
**Food** Grape, apple, oak, poplar, walnut, maple,  
**III. Larva** Rings (1992) Pl. V (1)  
**III. Adult** Covell (1984) Pl. 26 (17),  
 Rockburne/Lafontaine (1976) (411)  
**No. Recorded** 2

Guenée, 1852



**09664** Balsa labecula  
**Common** White-blotched Balsa  
**Food** Unknown  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 28 (6),  
 Rockburne/Lafontaine (1976) (435)  
**No. Recorded** 1

(Grote, 1880)



**09696** Platysenta vecors  
**Common** Ducky Groundling  
**Food** Unknown  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 27 (2),  
 Rockburne/Lafontaine (1976) (426)  
**No. Recorded** 2

(Guenée, 1852)



**09781** Basilodes pepita  
**Common** Gold Moth  
**Food** Spanish-needles  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 27 (18)  
**No. Recorded** 1

Guenee, 1852



#### Cuculliinae

**09957** Sunira bicolorago  
**Common** Bicolored Sallow  
**Food** Poplar, willow, cherry, grasses  
**III. Larva**  
**III. Adult** Covell (1984) Pl. 24 (17),  
 Rockburne/Lafontaine (1976) (321)  
**No. Recorded** 1

(Guenee, 1852)



#### Hadeninae

**10288** Polia detracta  
**Common** Disparaged Arches  
**Food** Oak, hickory, dandelion, acorns  
**III. Larva** Godfrey (1972) (541)  
**III. Adult** Covell (1984) Pl. 21 (14)  
**No. Recorded** 1

(Walker, 1857)



**10397** Lacinipolia renigera  
**Common** Bristly Cutworm Moth  
**Food** Clover, corn, tobacco, apple, cabbage,  
**III. Larva** Rings (1992) Pl. VII (1)  
**III. Adult** Covell (1984) Pl. 20 (11)  
**No. Recorded** 3

(Stephens, 1829)





**10405** Lacinipolia lorea

(Guenee, 1852)

**Common** Bridled Arches

**Food** Alfalfa, clover, dandelion, birch, sweetgum,

**III. Larva** Godfrey (1972) (513,514)

**III. Adult** Covell (1984) Pl. 20 (21)

**No. Recorded** 2



**10438** Pseudaletia unipuncta

(Haworth, 1809)

**Common** Armyworm Moth

**Food** Major pest of many plants including corn,

**III. Larva** Mitchell/Zim (1987) p. 124, Wright (1993) p. 38

**III. Adult** Covell (1984) Pl. 22 (18)

**No. Recorded** 8



**10446.1** Leucania lapidaria

(Grote, 1876)

**Common**

**Food** Grasses

**III. Larva** McCabe (1991) p. 42

**III. Adult** Holland (1968) Pl. 24 (39 as Heliophila multilinea)

**No. Recorded** 1



**10461** Leucania ursula

(Forbes, 1936)

**Common**

**Food** Honeysuckle, crag-grass

**III. Larva**

**III. Adult** Rockburne/Lafontaine (1976) (230)

**No. Recorded** 3



**10462**    *Leucania*                      *pseudargyria*  
**Common**    False Wainscot  
**Food**        Grasses  
**III. Larva**    Godfrey (1972) (484)  
**III. Adult**    Covell (1984) Pl. 22 (21),  
                     Rockburne/Lafontaine (1976) (229)  
**No. Recorded**    **2**

Guenee, 1852



**10521**    *Morrisonia*                      *confusa*  
**Common**    Confused Woodgrain  
**Food**        Birch, basswood, maple, elm, cherry, poplar  
**III. Larva**    Wagner (1997) p. 44  
**III. Adult**    Covell (1984) Pl. 22 (9)  
**No. Recorded**    **3**

(Hubner, [1831])



**10578**    *Pseudorthodes*                      *vecors*  
**Common**    Small Brown Quaker  
**Food**        Aster, dandelion, grasses, plantain  
**III. Larva**    McCabe (1991) p. 43  
**III. Adult**    Covell (1984) Pl. 22 (5),  
                     Rockburne/Lafontaine (1976) (215)  
**No. Recorded**    **2**

(Guenee, 1852)



**10587**    *Orthodes*                              *cynica*  
**Common**    Cynical Quaker  
**Food**        Plantain, dandelion, goldenrod  
**III. Larva**    McCabe (1991) p. 43  
**III. Adult**    Covell (1984) Pl. 22 (8),  
                     Rockburne/Lafontaine (1976) (217)  
**No. Recorded**    **1**

Guenee, 1852



Noctuinae

**10663**    *Agrotis*                      *ippsilon*                      (Hufnagel, 1776)

**Common**    Ipsilon Dart

**Food**        Corn, lawns, gardens, many farm crops

**III. Larva**    Rings (1992) Pl. III (1), Mitchell/Zim (1987) p. 120

**III. Adult**    Covell (1984) Pl. 19 (9)

**No. Recorded**    **5**



**10674**    *Feltia*                      *subgothica*                      (Haworth, 1809)

**Common**    Subgothic Dart

**Food**        Alfalfa, apple, cabbage, clover, corn, wheat

**III. Larva**

**III. Adult**    Rings (1992) Pl. 16 (29), Covell (1984) Pl. 19 (11)

**No. Recorded**    **9**



**10705**    *Euxoa*                      *messoria*                      (Harris, 1841)

**Common**    Reaper Dart

**Food**        Pest of cultivated flowers and vegetables,

**III. Larva**    Rings (1992) Pl. VII (6), Mirchell/Zim (1987) p. 122

**III. Adult**    Covell (1984) Pl. 18 (16)

**No. Recorded**    **1**



**10891**    *Ochropleura*                      *implecta*                      (Linnaeus, 1761)

**Common**    Flame-Shouldered Dart

**Food**        Clover

**III. Larva**    Lafontaine (1998) Pl. 8 (1)

**III. Adult**    Covell (1984) Pl. 19 (17)

**No. Recorded**    **2**





(Hubner, 1803-8)

Common Variegated Cutworm Moth

<b>Food</b>	General feeders on over 100 types of plants
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III. Larva    Rings (1992) Pl. VIII (3), Wright (1993) p. 38

**III. Adult** Covell (1984) Pl. 20 (16),  
Rockburen/Lafontaine (1976) (114)

**No. Recorded      6**



**10925.1** Noctua pronuba

Linnaeus, 1758

Common Large Yellow Underwing

**Food** Dandelion, chickweed, dock, vegetable crops

III. Larva      Carter (1986) Pl 29 (9)

III. Adult Carter (1986) Pl 29 (9), Lafontaine (1998) Pl. 1 (46,47)

**No. Recorded      37**



**10942.1** Xestia dolosa

Franclemont, 1980

Common Greater Black-Letter dart

<b>Food</b>	apple, clover, corn, maple, many other plants
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III. Larva   Rings (1992) Pl. VIII (4), Mitchell/Zim (1987)  
p. 120

III. Adult Covell (1984) Pl. 20 (4), Lafontaine (1998) Pl. 3 (30,31)

No. Recorded **3**

**11000**    Anaplectoides    prasina

Denis &amp; Schiffermuller

**Common**    Green Arches

Food	General feeded
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
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86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

### III. Larva

III. Adult      Covell (1984) Pl. 20 (15)

No. Recorded 1



**11029**    *Abagrotis*                      *alternata*                      (Grote, 1864)

**Common**    Greater Red Dart

**Food**    Apple, ash, cherry, hickory, oak, walnut

**III. Larva**    Rings (1992) Pl. VIII (5), Wagner (1995) p. 12

**III. Adult**    Covell (1984) Pl. 20 (13), Lafontaine (1998)  
                    Pl. 7 (11-14)

**No. Recorded**    **2**



**Appendix A: Data for Moths Recorded at NASA Glenn Research Center 2001  
(Date, Trap, Number Recorded)**

**04654**  
26-Jun Trap 1 3

**04665**  
26-Jun Trap 1 1

**04669**  
26-Jun Trap 1 2

**04671**  
20-Jul Trap 1 1

**05159**  
1-Aug Trap 3 4  
20-Jul Trap 1 1

**05524**  
26-Jun Trap 1 20

**05533**  
20-Jul Trap 3 2

**06273**  
20-Jul Trap 1 3  
20-Jul Trap 3 8

**06344**  
20-Jul Trap 3 14

**06348**  
1-Aug Trap 3 2

**06621**  
1-Aug Trap 3 2

06654  
1-Aug Trap 3 1

**06720**  
26-Jun Trap 1 2

**06724**  
20-Jul Trap 1 2

**06798**  
20-Jul Trap1 1

**06822**  
9-May Trap 2 1

**06840**  
9-May Trap 1 1

**06844**  
9-May Trap 1 4

**06885**  
26-Jun Trap 1 1

**06941**  
26-Jun Trap 1 7

**06963**  
26-Jun Trap 1 1

**06966**  
20-Jul Trap 3 1

**06987**  
20-Jul Trap 1 2

**07009**  
26-Jun Trap 1 2

**07159**  
20-Jul Trap 1 1

**07169**  
26-Jun Trap 1 1

**07196**  
1-Aug Trap 3 1  
15-Aug Trap 3 1

**07329**  
9-May Trap 1 1

**07388**  
20-Jul Trap 3 1

**07390**  
26-Jun Trap 1 3

**07399**  
26-Jun Trap 2 6

**07414**  
1-Aug Trap 3 1

**07416**  
15-Aug Trap 3 3

**07440**  
26-Jun Trap 1 1

**07698**  
26-Jun Trap 1 8

**07746**  
26-Jun Trap 1 1

**07885**  
26-Jun Trap 1 1

**07895**  
9-May Trap 2 1

**07907**  
20-Jul Trap 1 1

**07915**  
15-Aug Trap 4 3  
20-Jul Trap 3 1

**07919**  
26-Jun Trap 2 1

**07920**  
15-Aug Trap 3 1

**07975**  
20-Jul Trap 1 4

**07983**  
20-Jul Trap 3 1

**07994**  
1-Aug Trap 3 3

**08017**  
20-Jul Trap 3 1

**08129**  
26-Jun Trap 1 1

**08134**  
9-May Trap 1 1

**08137**  
1-Aug Trap 3 1

**08171**  
26-Jun Trap 2 2

**08203**  
20-Jul Trap 1 3  
20-Jul Trap 3 14

**08230**  
20-Jul Trap 1 3  
20-Jul Trap 3 1

**08238**  
20-Jul Trap 1 1

**08318**  
20-Jul Trap 3 2

**08322**  
20-Jul Trap 3 1

**08323**  
20-Jul Trap 1 2

**Appendix A: Data for Moths Recorded at NASA Glenn Research Center 2001  
(Date, Trap, Number Recorded)**

<b>08338</b> 9-May Trap 1 1	<b>08857</b> 1-Aug Trap 3 1	<b>10405</b> 26-Jun Trap 1 1
<b>08351</b> 26-Jun Trap 2 3	<b>08908</b> 15-Aug Trap 4 1	<b>10438</b> 26-Jun Trap 1 2 26-Jun Trap 2 3
<b>08353</b> 1-Aug Trap 3 1 15-Aug Trap 3 2	<b>08924</b> 20-Jul Trap 3 1	<b>10446.1</b> 26-Jun Trap 1 1
<b>08355</b> 26-Jun Trap 2 2	<b>09047</b> 26-Jun Trap 1 1	<b>10461</b> 15-Aug Trap 4 3
<b>08381</b> 15-Aug Trap 4 5	<b>09057</b> 1-Aug Trap 3 1	<b>10462</b> 26-Jun Trap 1 1
<b>08393</b> 26-Jun Trap 1 1	<b>09229</b> 1-Aug Trap 3 2	<b>10521</b> 9-May Trap 1 1
<b>08398</b> 15-Aug Trap 3 1	<b>09237</b> 20-Jul Trap 1 1	<b>10578</b> 15-Aug Trap 4 2
<b>08443</b> 20-Jul Trap 3 1	<b>09245</b> 26-Jun Trap 1	<b>10587</b> 26-Jun Trap 2 1
<b>08445</b> 9-May Trap 2 1	<b>09299</b> 26-Jun Trap 1 1	<b>10663</b> 15-Aug Trap 3 3
<b>08465</b> 20-Jul Trap 1 1	<b>09301</b> 20-Jul Trap 3 1	<b>10674</b> 15-Aug Trap 4 9
<b>08479</b> 26-Jun Trap1 1	<b>09329</b> 26-Jun Trap 1 1	<b>10705</b> 20-Jul Trap 1 1
<b>08555</b> 26-Jun Trap 2 2	<b>09545</b> 1-Aug Trap 3 1	<b>10891</b> 1-Aug Trap 3 2
<b>08587</b> 20-Jul Trap 3 2	<b>09633</b> 26-Jun Trap 1 1	<b>10915</b> 15-Aug Trap 4 1 20-Jul Trap 1 1
<b>08692</b> 20-Jul Trap 3 1	<b>09638</b> 20-Jul Trap 1 1	<b>10925.1</b> 15-Aug Trap 4 3 20-Jul Trap 1 8
<b>08727</b> 15-Aug Trap 4 1	<b>09664</b> 26-Jun Trap 1 1	<b>10942.1</b> 26-Jun Trap 2 3
<b>08738</b> 15-Aug Trap 3 1	<b>09696</b> 20-Jul Trap 1 2	<b>11000</b> 20-Jul Trap 3 1
<b>08739</b> 20-Jul Trap 1 2	<b>09781</b> 15-Aug Trap 3 1	<b>11029</b> 1-Aug Trap 3 1
<b>08801</b> 20-Jul Trap 1 1	<b>09957</b> 15-Aug Trap 3 1	
<b>08834</b> 15-Aug Trap 3 1	<b>10288</b> 26-Jun Trap 2 1	
	<b>10397</b> 26-Jun Trap 1 3	

## **Appendix B: Checklist of the Lepidoptera of the NASA Glenn Research Center Cuyahoga County, Ohio Results of 1995 and 2001 Surveys**

### **FAMILY HESPERIIDAE - Skippers**

Skippers are usually small to medium, thick-bodied, orange, black to white in color butterflies. They have six fully developed walking legs and elongated antennal clubs often hooked at the tip.

03870 *Epargyreus clarus*  
03959 *Erynnis baptisiae*  
04004 *Ancyloxypha numitor*  
04012 *Thymelicus lineola*  
04036 *Polites peckius*  
04048 *Pompeius verna*

### **FAMILY PAPILIONIDAE - Swallowtail Butterflies**

The swallowtails are large and brightly colored and usually have a long tail projecting from the hind wing. The males of most swallowtails patrol long routes in search of females. Adult feeding is often restricted to flowers with long tubes since the mouthparts are long. The larval hosts include several families of plants with aromatic leaves such as citrus, umbel, laurel, and pipevine families.

04176 *Papilio glaucus*

### **FAMILY Pieridae Whites and Sulfurs**

These butterflies are usually small to medium sized and are predominately white, yellow, or orange, often with some black or pinkish scaling. Adults feed on floral nectar and freshly emerged males of many species often take moisture at wet sand or mud. Larval hosts include crucifers, legumes, composites, heaths, and willows.

04197 *Pieris rapae*  
04209 *Colias philodice*  
04210 *Colias eurytheme*

### **FAMILY NYMPHALIDAE - Brush-footed Butterflies**

These butterflies have strongly reduced forelegs, which are used as smell sensors instead of for walking. The pendant pupae hang from a silk button. This is the largest and most diverse family of true butterflies.

04420 *Polygonia interrogationis*  
04435 *Vannessa cardui*  
04437 *Vannessa atalanta*  
04450 *Speyeria cybele*  
04481 *Phyciodes tharos*

### **FAMILY SATYRIDAE - Satyr and Wood Nymph Butterflies**

These are medium-sized brown butterflies with eyespots on the ventral wing surface of most species. They have a low, erratic, skipping flight pattern. Adults prefer to feed on sap flows, rotting fruit, or dung. Almost all feed on grasses or sedges as larvae.

04578 *Megisto cymela*

### **FAMILY DANAIIDAE - Milkweed Butterflies**

The one species found locally is the Monarch Butterfly. All stages of this butterfly are distasteful and emetic due to the cardiac glycosides contained in the larval host leaves of the milkweed plants. The adult is a large orange butterfly with black scaling on the veins and a broad black margin on both wings above.

04614 *Danaus plexippus*



## **FAMILY LIMACODIDAE - Slug Caterpillar Moths**

Medium to medium-small moths with stout, hairy bodies and broad, rounded wings. Most are brown or yellowish with contrasting forewing markings. Larvae are naked to densely hairy which are often stinging hairs.

04654 *Tortricidia flexuosa*  
04665 *Lithacodes fasciola*  
04669 *Apoda biguttata*  
04671 *Prolimacodes badia*

## **FAMILY PYRALIDAE - Pyralid Moths**

Small to medium sized moths comprising the third largest moth family in North America. These moths hold their wings out to the side, fold them flat, or roll them up, making their bodies look like sticks. The larvae feed on dry or decaying vegetable matter and a number are stem borers in grasses. Some larvae live in beehives and some live an aquatic life. Many pyralids are important pests of crops and stored food products such as the European corn borer.

05159 *Desmia funeralis*  
05524 *Hypsopygia costalis*  
05533 *Herculia olinalis*

## **FAMILY GEOMETRIDAE - Inchworm Moths**

Small to medium sized moths with slender bodies and broad wings. Larvae usually twiglike, with 2-3 pairs of abdominal prolegs absent. Larvae move by extending the front legs of the body as far as possible, then looping the rear of the body up to meet it, hence they are often called measuringworms or inchworms. Many species are serious agricultural and forest pests.

06273 *Itame pustularia*  
06344 *Semiothisa signaria*  
06348 *Semiothisa fassinotata*  
06621 *Melanolophia signataria*  
06654 *Hypagyrtis unipunctata*  
06720 *Lytrosis unitaria*  
06724 *Euchlaena serrata*  
06798 *Ennomos subsignaria*  
06822 *Metarranthia duaria*  
06840 *Plagodis serinaria*  
06844 *Plagodis alcoolaria*  
06885 *Besma quercivoraria*  
06941 *Eusarca confusaria*  
06963 *Tetracis crocallata*  
06966 *Eutrapela clemataria*  
06987 *Antepione thisoaria*  
07009 *Nematocampa limbata*  
07159 *Scopula limboundata*  
07169 *Scopula inductata*  
07196 *Eulithis diversilineata*  
07329 *Anticlea vasiliata*  
07388 *Xanthorhoe ferrugata*  
07390 *Xanthorhoe lacustrata*  
07399 *Euphyia unangulata*  
07414 *Orthonama obstipata*  
07416 *Orthonama centrostrigaria*  
07440 *Eubaphe mendica*

## **FAMILY LASIOCAMPIDAE - Tent Caterpillar and Lappet Moths**

Medium-sized moths with hairy bodies that usually exceed hindwing in length. Larvae of some species build communal webs (tents) in trees for protection. Some species are serious pests of forests and shade trees.

07698 *Malacosoma disstria*

## **FAMILY SATURNIIDAE - Giant Silkworm and Royal Moths**

This family includes the largest moths in our area. Larvae feed on mostly leaves of trees and shrubs. The giant silkworm moths spin cocoons for pupation while the royal moths generally pupate in the soil.

07746 *Automeris io*

## **FAMILY SPHINGIDAE - Hawk Moths**

Medium to large moths with very robust bodies. The adult abdomen usually tapers to a sharp point. Wings narrow with forewing sharp-pointed or with an irregular margin. Most larva have a dorsal horn at the tip of the abdomen. Larvae feed both day and night on many kinds of woody and herbaceous plants and some are serious pests such as the tomato hornworm and tobacco hornworm.

07885 *Darapsa myron*

## **FAMILY NOTODONTIDAE - Prominent Moths**

These are medium-sized, stout-bodied moths mostly drab-colored brown or gray. The larvae often come in strange shapes. Some are green and look like leaves or other parts of their food plant.

07895 *Clostera albosigma*

07907 *Datana integerrima*

07915 *Nadata gibbosa*

07919 *Peridea basitriens*

07920 *Peridea angulosa*

07975 *Macrurocampa marthesia*

07983 *Heterocampa obliqua*

07994 *Heterocampa guttivitta*

08017 *Oligocentria lignicolor*

## **FAMILY ARCTIIDAE - Tiger, Lichen and Wasp Moths**

Small to medium sized moths with moderately broad wings. The different species may be white, orange, or red with prominent black markings. The larvae are very hairy (woollybear) and feed on low-growing plants and lichens.

08129 *Pyrrharctia isabella*

08134 *Spilosoma congrua*

08137 *Spilosoma virginica*

08171 *Apantesis nais*

08203 *Halysidota tessellaris*

08230 *Cycnia tenera*

08238 *Euchaetes egle*

## **FAMILY LYMANTRIDAE - Tussock Moths**

These are medium-sized moths and the females are usually larger than the males. The larvae are generally very hairy, usually with two anterior and two or three posterior long hair tufts. The larvae feed principally on woody plants and some are very destructive such as the gypsy moth.

08318 *Lymantria dispar*

## FAMILY NOCTUIDAE - Owlet or Noctuid Moths

This is the largest family in the Order Lepidoptera. Some of these moths are brightly colored, but most are gray to brown with complex patterns of lines and spots. These are small to large moths with stout, hairy bodies. Larvae of noctuid species feed on foliage of a wide variety of plants, dead leaves, lichens, and fungi. Many are serious pests of trees and cultivated plants. These moths pupate in cells in the soil, in cavities of food plants, or in silk cocoons.

08322	<i>Idia americalis</i>	10942.1	<i>Xestia dolosa</i>
08323	<i>Idia aemula</i>	11000	<i>Anaplectoides prasina</i>
08338	<i>Phalaenophana pyramusalis</i>	11029	<i>Abagrotis alternata</i>
08351	<i>Zanclognatha cruralis</i>		
08353	<i>Zanclognatha ochreipennis</i>		
08355	<i>Chytolita morbidalis</i>		
08381	<i>Renia discoloralis</i>		
08393	<i>Lascoria ambigualis</i>		
08398	<i>Palthis asopialis</i>		
08443	<i>Bomolocha bijugalis</i>		
08445	<i>Bomolocha abalienalis</i>		
08465	<i>Plathypena scabra</i>		
08479	<i>Spargaloma sexpunctata</i>		
08555	<i>Scoliopteryx libatrix</i>		
08587	<i>Panopoda rufimargo</i>		
08692	<i>Zale galbanata</i>		
08727	<i>Parallelia bistriaris</i>		
08738	<i>Caenurgina crassiuscula</i>		
08739	<i>Caenurgina erechtea</i>		
08801	<i>Catocala ilia</i>		
08834	<i>Catocala amatrix</i>		
08857	<i>Catocala ultronia</i>		
08908	<i>Autographa precationis</i>		
08924	<i>Anagrapha falcifera</i>		
09047	<i>Lithacodia muscosula</i>		
09057	<i>Homophoberia apicosa</i>		
09229	<i>Acronicta hasta</i>		
09237	<i>Acronicta interrupta</i>		
09245	<i>Acronicta haesitata</i>		
09299	<i>Eudryas unio</i>		
09301	<i>Eudryas grata</i>		
09329	<i>Apamea cariosa</i>		
09545	<i>Euplexia benesimilis</i>		
09633	<i>Callopistria cordata</i>		
09638	<i>Amphipyra pyramidoides</i>		
09664	<i>Balsa labecula</i>		
09696	<i>Platysenta vecors</i>		
09781	<i>Basilodes pepita</i>		
09957	<i>Sunira bicolorago</i>		
10288	<i>Polia detracta</i>		
10397	<i>Lacinipolia renigera</i>		
10405	<i>Lacinipolia lorea</i>		
10438	<i>Pseudaletia unipuncta</i>		
10446.1	<i>Leucania lapidaria</i>		
10461	<i>Leucania ursula</i>		
10462	<i>Leucania pseudargyria</i>		
10521	<i>Morrisonia confusa</i>		
10578	<i>Pseudorthodes vecors</i>		
10587	<i>Orthodes cynica</i>		
10663	<i>Agrotis ipsilon</i>		
10674	<i>Feltia subgothica</i>		
10705	<i>Euxoa messoria</i>		
10891	<i>Ochropleura implecta</i>		
10915	<i>Peridroma saucia</i>		
10925.1	<i>Noctua pronuba</i>		